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A. I consider myself to be an expert on the product from my readings of the material and my general understanding of the video field.

Q. And the first time you read any detailed materials about the Paint Box was February 2006?

A. That's correct. Sometime in February.

Q. So you've been familiar with the details regarding the Paint Box for a little over three months?

A. That's correct.

Q. And it's your belief that that makes you an expert on the Quantel Paint Box?

MR. BEAMER: Objection; asked and answered, argumentative.

A. Again, as I said, I feel that I am an expert in the field of video, and I have a lot of familiarity working with different types of video equipment. And the Paint Box would fall into that category, so I would

expect that I would feel comfortable qualifying myself as such.

Q. Do you agree that Mr. Taylor is an expert on the Quantel Paint Box?

A. Yes.

MR. BEAMER: Objection; calls for speculation.

Q. Sir, I want to ask you some questions about the Paint Box system as sold and demonstrated in March, April '82, that's the subject of Mr. Taylor's expert report. You are familiar with that report?

A. Yes, I am.

Q. Would you agree that the Paint Box could receive the video from an external source?

A. Yes.

Q. Do you agree that the Paint Box could receive video data representing full size images?

A. Yes.

Q. Do you agree that the Paint

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14:32:25 1 **Box had multiple frame stores?**
14:32:28 2 A. Yes. I know that there were
14:32:32 3 multiple frame stores, yes, that's
14:32:34 4 correct.
14:32:34 5 **Q. And those frame stores were**
14:32:36 6 **implemented with random access memory;**
14:32:38 7 **correct?**
14:32:39 8 A. Yes, that would be typical
14:32:41 9 that a frame store would be implemented
14:32:44 10 that way.
14:32:45 11 **Q. And do you agree that**
14:32:46 12 **either of those frame stores could**
14:32:48 13 **store a full size image?**
14:32:50 14 A. Yes.
14:32:52 15 **Q. Do you agree that the Paint**
14:32:54 16 **Box had at least one disk?**
14:32:56 17 A. Yes, I'm aware of that.
14:32:58 18 **Q. And the disk could store**
14:33:00 19 **video images?**
14:33:01 20 A. Yes, I'm aware of that.
14:33:03 21 **Q. It could store full size**
14:33:05 22 **video images?**
14:33:07 23 A. Yes, it could store full
14:33:09 24 size images.
25

then reside as one composite image. That much I am aware of, yeah.

Q. Let's put aside for a moment what happens when you stick the image down. We will get to that. Do you agree that the Paint Box could generate reduced size images?

MR. BEAMER: Asked and answered.

A. Yes, as I stated, that's correct.

Q. Do you agree that the Paint Box could automatically generate reduced size images?

MR. BEAMER: Objection; vague.

A. Well, automatically, under control of a user going through a series of steps.

Q. Well, if the Paint Box browse were used to browse full size images stored on disk, didn't that browse feature automatically generate reduced size images?

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14:36:58 **Quantel Paint Box, when it browsed full**
14:37:03 **size images stored on disk, would**
14:37:05 **automatically generate reduced size**
14:37:07 **images; correct?**
14:37:09 MR. BEAMER: Asked and
14:37:10 answered.
14:37:14 A. Yes. And that in fact would
14:37:15 be what a normal browse for a, let's
14:37:21 say for a still store, that would be
14:37:23 the normal mode of browsing. You would
14:37:27 invoke the browse and then that would
14:37:30 occur.
14:37:30 **Q. So we both agree that the**
14:37:32 **Paint Box could automatically generate**
14:37:34 **reduced size images; correct?**
14:37:36 MR. BEAMER: Asked and
14:37:37 answered.
14:37:38 A. Yes. As I stated, it can
14:37:40 reduce -- it can provide and generate
14:37:43 reduced size images, taking images,
14:37:46 full size images off the disk and
14:37:49 putting them into the output frame
14:37:52 store.
14:37:52 **Q. And the Paint Box could**

generate a reduced size image that was a small version of the full size image?

THE WITNESS: I'm sorry, could you please read back the question.

(Record read as requested.)

A. Well, as we've already discussed for the browse screen, we know that the full size image stored on disk can go through the size reducer and that that resulting reduced size image then becomes a part of a browse screen. And that that's a reduced size image that the Paint Box is able to create that way.

Q. Right. So we both agree that the Paint Box could use its size reducer to generate a reduced size image; correct?

A. Yes, in the way that -- in the way that I've described, yes.

Q. And that reduced size image could be stored in either of the frame stores; correct?

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MR. BEAMER: Objection.

A. That reduced sized image most certainly could be stored in the output frame store. And it's temporarily present in the second frame store.

Q. And that reduced size image could be stored in the random access memory of the Paint Box; correct?

A. Yes, that's correct, the frame store is the random access memory.

Q. And the reduced size image could be stored in one frame store while a full size image was in the other frame store; correct?

MR. BEAMER: Objection; vague.

A. When we say stored, it's stored temporarily so that it can then be stuck on to the output frame store.

Q. But regardless of whether in your opinion it's temporary or not, you agree that the Paint Box could

anything at all can be in two separate frame stores, nothing is necessarily precluding that. But it's a matter of the entire operation and how that reduced size image got there, that's of significance to me with regard to my analysis of that.

Q. But you agree, sir, do you not, that the Paint Box could simultaneously store one full size image and one reduced size image in its frame stores simultaneously; correct?

MR. BEAMER: Asked and answered.

MR. SUMMERSGILL: Strike that. Because I said simultaneously twice. Let me try it again.

THE WITNESS: Okay.

Q. You agree, sir, do you not, that the Paint Box could store a full size image and a reduced size image in its frame stores simultaneously; correct?

MR. BEAMER: Asked and

answered, vague.

A. As I've stated, through a particular series of steps, it's possible to have the reduced size image temporarily in one frame store. And the full size counterpart present in the other, the display frame store.

Q. Now, do you agree that the Paint Box could output images from disk to its frame stores?

A. Yes.

Q. And it could output full size images?

A. Yes, that's correct.

Q. And it could output images from disk upon a user's command?

A. Yes, I believe that's correct.

Q. Do you agree that the Paint Box frame stores had input ports?

A. Yes.

Q. Do you agree that the Paint Box frame stores had separate output ports?

we know that -- I'm sorry, we were talking about going from the disk to the random access memory?

Q. I was asking you about the transfer from size reducer to random access memory.

A. Yes, we know that, as in the case of the figure 19 in the -- I just want to make sure, I'm just looking at the figure. Figure 18. We know that we have a direct transfer from -- this is in the '776 patent, of the size reducer to the random access memory at the frame store, yes, that's correct.

Q. So do you agree that the Quantel Paint Box could transfer images directly from the size reducer to the random access memory?

A. Yes, that's correct.

Q. And do you agree that the Paint Box could transfer images directly from the disk to random access memory?

MR. BEAMER: Read that back,

15:00:17 1 **that the Paint Box filter card**
15:00:18 2 **contained random access memory?**
15:00:21 3 MR. BEAMER: Objection;
15:00:21 4 vague.
15:00:22 5 A. I believe it did. I would
15:00:24 6 need to look at the manual to be sure
15:00:27 7 that that's the type of memory that it
15:00:31 8 had.
15:00:31 9 **Q. Was the transfer from disk**
15:00:35 10 **to the random access memory of the**
15:00:38 11 **filter card a direct transfer?**
15:00:41 12 A. It's my understanding that
15:00:45 13 it would be.
15:00:49 14 **Q. Now, the Paint Box frame**
15:00:53 15 **store could also output video images**
15:00:57 16 **for display on the Paint Box frame**
15:00:59 17 **store; correct?**
15:01:00 18 A. Yes, that's right.
15:01:01 19 **Q. The Paint Box with the use**
15:01:04 20 **of its combiner, could access a reduced**
15:01:08 21 **size image stored at one frame store**
15:01:10 22 **and a full size image stored at another**
15:01:13 23 **frame store simultaneously; correct?**
15:01:21 24 THE WITNESS: I'm sorry,
25

access one reduced size image and one full size image simultaneously; correct?

A. Yes, as I would expect.

Q. And you agree --

MR. BEAMER: Are you done with your answer?

A. As I would expect for products of this nature, it most certainly would be possible to have, and I would expect, some type of a combiner circuit that would perform that type of an operation.

Q. So that was well known in the art?

A. Yes, that was well known in the art.

Q. Now, you agree that the Paint Box had a browse feature.

A. Yes, I'm familiar with that.

Q. And you agree that the Paint Box could store multiple reduced size images in random access memory?

MR. BEAMER: Read that back,

please.

(Record read as requested.)

A. Yes, as we went over a little while earlier, it was possible to pull up full size images from the disk, have them go through the filter card and size reducer, and have those reduced sized images reside in an appropriate spot in the random access memory, to create a browse screen.

Q. So you agree that Paint Box could store multiple reduced size images in random access memory; correct?

A. Yes, that's correct.

Q. And do you also agree that the Paint Box could display a mosaic of reduced size images?

A. The -- well, I would call that, what I was just describing right now, this array of reduced size images for the browse, that would be to one skilled in the art, one would call that a mosaic. So yes.

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16:09:35 16:09:36 16:09:38 16:09:41 16:09:45 16:09:47 16:09:51 16:09:53 16:09:59 16:10:02 16:10:08 16:10:11 16:10:13 16:10:16 16:10:18 16:10:19 16:10:21 16:10:26 16:10:31 16:10:33 16:10:35 16:10:38 16:10:40 16:10:44

Q. Sir, before the break you were describing the process by which an operator using the Paint Box could put a rectangle around the reduced size image in the frame store and save only the pixels corresponding to that image to disk; is that correct?

A. I was referring to using the rectangle function to select those pixels which were from the -- which were from the full size image which was reduced and stuck on to the full size image to create a new composite full size image and using the rectangle function for that operation, yes.

Q. When the operator places the rectangle over the pixels that represent the reduced size image, or what you call part of the full size image, only the pixels within that rectangle are saved to disk; correct?

MR. BEAMER: Objection.

A. That's my understanding.

Q. So assuming that you

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Q. And the Paint Box could reduce the size of those cutouts; correct?

A. That's correct.

Q. And the Paint Box could store those reduced size cutouts to disk; correct?

MR. BEAMER: Objection.

A. The Paint Box could store cutouts to disk.

Q. And the Paint Box could then browse cutouts that were stored on disk; correct?

A. Yes, that's correct.

Q. And it could browse reduced size cutouts that were stored on disk; correct?

A. Yes, that's my understanding.

Well, when we say reduced sized cutouts, though, what we're talking about are cutouts. They are still cutouts.

Q. Well, cutouts can be

01:17 1
17:01:19 2 **reduced in size; correct?**
17:01:20 3 A. Yes, it's my understanding
17:01:22 4 that you would be able to pull up a
17:01:26 5 cutout and manipulate it, for example,
17:01:28 6 reducing it in size.
17:01:33 7 **Q. And after you reduce it in**
17:01:36 8 **size, you can store that cutout to disk**
17:01:38 9 **on the Paint Box; correct?**
17:01:40 10 A. That's my understanding,
17:01:40 11 yes.
17:01:43 12 **Q. And then using the Paint**
17:01:45 13 **Box browse function, you can browse**
17:01:47 14 **through cutouts that are stored on**
17:01:48 15 **disk; correct?**
17:01:50 16 A. Yes, that's correct.
17:01:53 17 **Q. And that's set forth in the**
17:01:59 18 **Paint Box manual guide; correct?**
17:01:59 19 **Strike that.**
17:02:00 20 **That's set forth in the**
17:02:02 21 **Paint Box user guide; correct?**
17:02:04 22 A. Yes, I have reviewed that
17:02:07 23 document, I believe that -- I know that
17:02:15 24 that is correct, yes.
25 **Q. And as far as you know, the**

pulling off the amount of data for these individual pieces.

Q. So one of the reasons the Paint Box browse cutouts is faster than the Paint Box browse of full size images, is because the cutouts contain less data than the full size images; correct?

A. Yes. Because again, what bogs down the system is needing to pull off the full size image. And in fact that's what is such a benefit of the '121 system, where you don't need to be able -- where you don't need to pull off the full size image and send it through the size reducer each time.

Q. Now, you agree that the demonstration that Mr. Taylor showed on his videotape could actually be done on the Quantel Paint Box; correct?

A. I have no reason to think that an operator couldn't set up the steps to be able to create that -- to be able to create that effect.

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14:05 1
17:14:06 2 **Q. Now, when the Paint Box**
17:14:10 3 **browses full size images, the operator**
17:14:17 4 **can then select one of the resulting**
17:14:20 5 **reduced size images in the browse in**
17:14:22 6 **order to obtain the full size image;**
17:14:24 7 **correct?**
17:14:30 8 A. We are talking about for the
17:14:30 9 Paint Box?
17:14:33 10 **Q. Yes.**
17:14:35 11 A. Yes, that's correct.
17:14:44 12 **Q. So in the Paint Box, when**
17:14:48 13 **an operator selects a reduced size**
17:14:50 14 **image in the browse in order to obtain**
17:14:53 15 **a full size image corresponding to that**
17:14:57 16 **reduced size image, is there a working**
17:14:59 17 **relationship between the browsed image**
17:15:03 18 **and its corresponding full sized image?**
17:15:06 19 A. For that moment in time,
17:15:09 20 yes. Because the full size image went
17:15:12 21 through -- went through the size
17:15:17 22 reducer and a browse screen was
17:15:23 23 created. And then there would be a way
17:15:28 24 to go from the reduced sized image
25 that's in the browse screen to, back to

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15:30 the full sized image. And of course
17:15:33 that's really what the prior art
17:15:34 systems all allowed you to do that,
17:15:36 otherwise the notion of browsing really
17:15:40 wouldn't -- it wouldn't work, because
17:15:43 then you wouldn't be -- you wouldn't be
17:15:46 browsing.
17:15:47 **Q. Now, sir, we talked earlier**
17:15:49 **about the embodiment of, Mr. Beaulier's**
17:15:54 **embodiment of the '121 system, which**
17:15:56 **was the ESS-3 system. Do you recall**
17:16:00 **that?**
17:16:01 A. I'm not sure when we
17:16:10 discussed that. Sorry.
17:16:11 **Q. Fair enough. We may not**
17:16:13 **have used the term ESS-3.**
17:16:17 **The system designed by**
17:16:26 **Mr. Beaulier, in your expert opinion,**
17:16:28 **maintained a relationship between full**
17:16:29 **and reduced size images by assigning a**
17:16:33 **number to the reduced size image that**
17:16:36 **correlated with the number assigned to**
17:16:37 **the full size image; correct?**
17:16:40 A. In a particular example, one

intervention from the CPU."

Do you see that?

A. Yes, I do.

Q. And Mr. Sheikh is indicating that the AVA was capable of transferring image data directly between frame store and disk; correct?

A. Yes, that's correct.

Q. And the advantage of doing that, according to Mr. Sheikh, is that it facilitates fast picture storage and recall; correct?

A. Yes, that's correct.

Q. And is it your understanding that the AVA system was capable of transferring image data directly from disk to the frame store, as Mr. Sheikh describes here?

A. Yes, that's correct.

Q. Now, sir, turning back to your expert report. Specifically please turn to paragraph 190.

Do you have that, sir?

A. Yes, I do.

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18:01:14 **Q. Paragraph 190 discusses the potential of combining the AVA system with an electronic still store system; correct?**

18:01:17 A. Yes, that's correct.

18:01:25 **Q. In your expert opinion, was it common in the 1982 time period to use graphics systems, such as the AVA, in conjunction with electronic still store systems?**

18:01:29 A. I would say that that's most certainly within the realm of possibility, to be utilizing systems that way, combining systems.

18:01:36 **Q. That was well known as of 1982; correct?**

18:01:42 A. Yes, that's correct.

18:01:43 **Q. Sir, do you agree that the Ampex AVA system could generate reduced size images?**

18:01:47 A. Yes.

18:01:49 **Q. And the AVA could display reduced size images in its frame store; correct?**

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18:01:53

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18:01:57

18:01:58

18:02:45

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18:02:52

18:02:55

18:02:58

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A. Yes, that's correct. In a similar way as we were discussing for the Paint Box, it was possible to pull up images from the disk, use the computer to perform the size reduction, filtering and size reduction, and then reduce the image and present it for display.

Q. And it could be displayed in the AVA frame store; correct?

A. Yes, that's correct. And again, this is a case of an image that's been reduced in size and then inserted into a full size image so as to be a composite image, what I've been calling a composite image.

Q. In paragraph 166 of your expert report, you indicate that the AVA only had a single frame store that could hold only a single full size image.

Do you see that?

A. Yes, that's correct.

Q. You agree, do you not, that

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C E R T I F I C A T E

STATE OF NEW YORK)

: ss.

COUNTY OF NEW YORK)

I, ERIC J. FINZ, a Shorthand Reporter and Notary Public within and for the State of New York, do hereby certify:

That ALAN CAVALLERANO, the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by the witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 8 day of May, 2006.

CERTIFIED ORIGINAL
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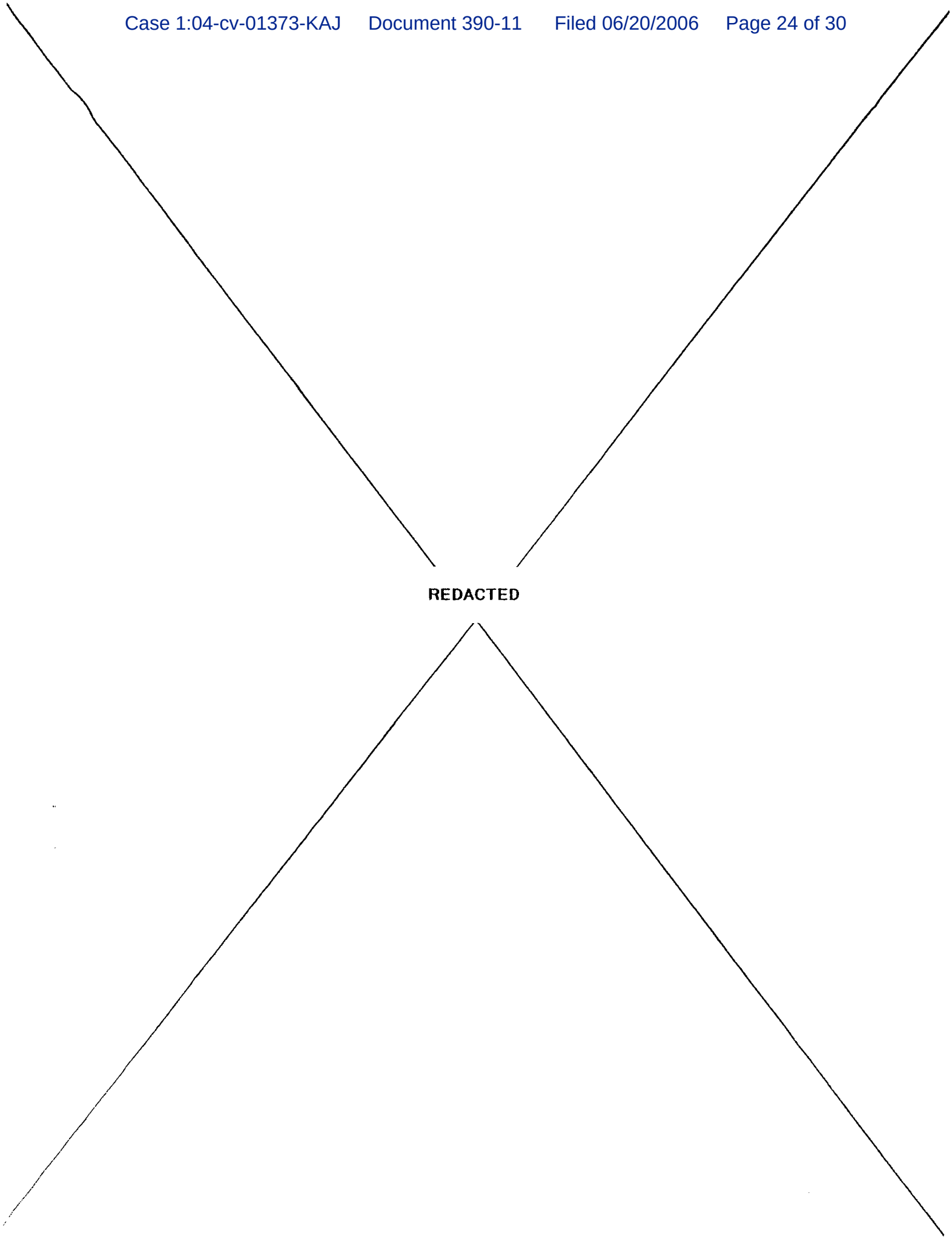
B-440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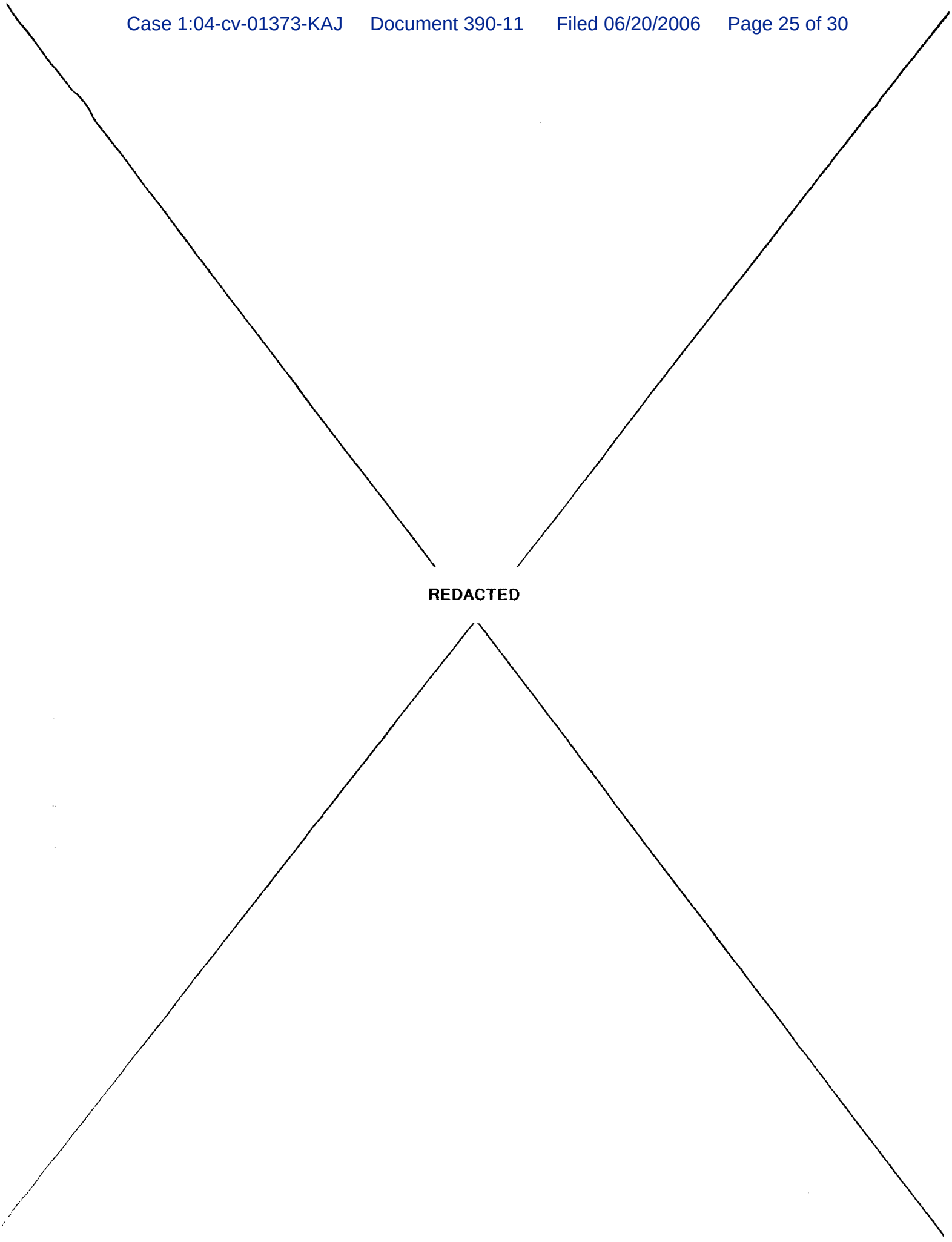
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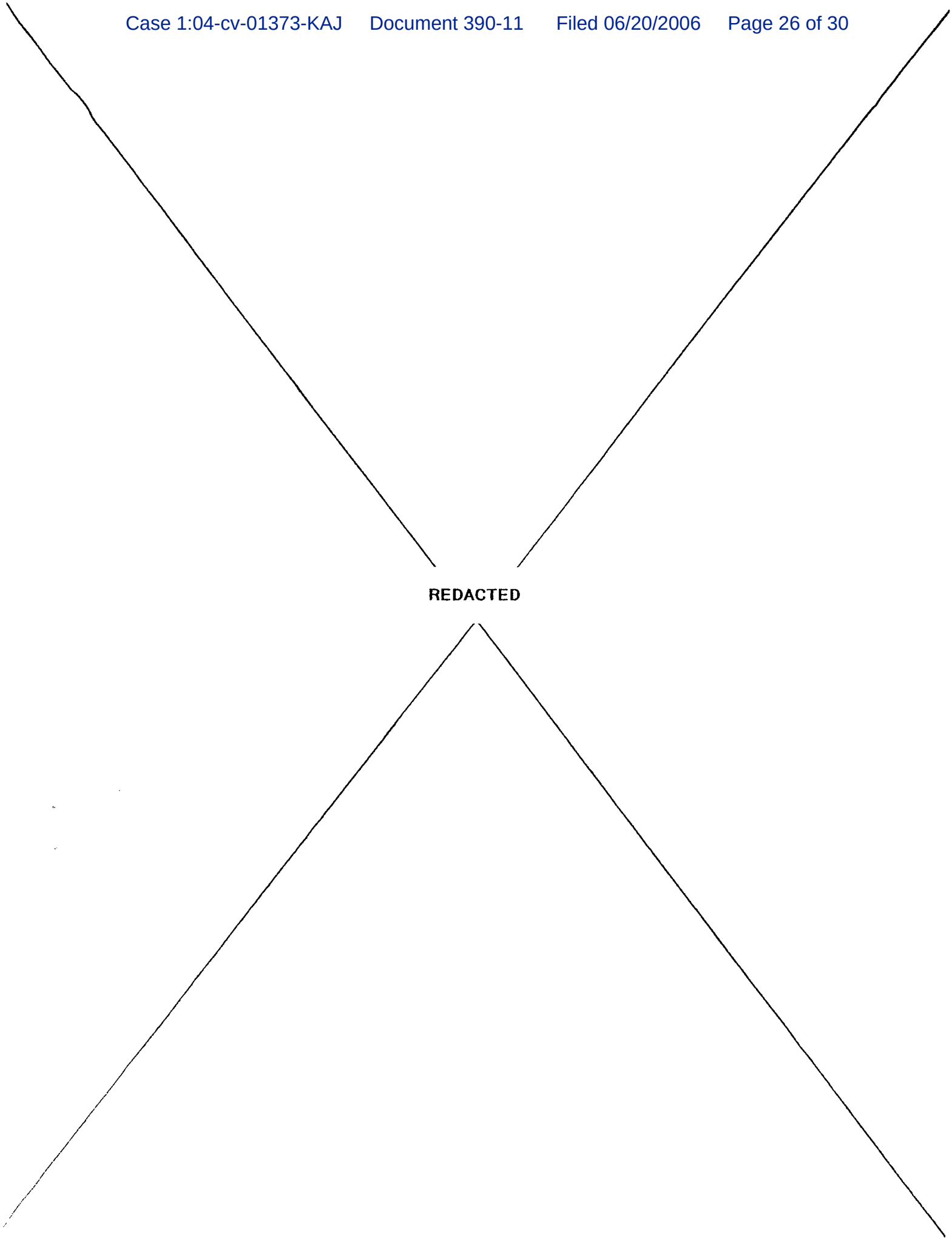
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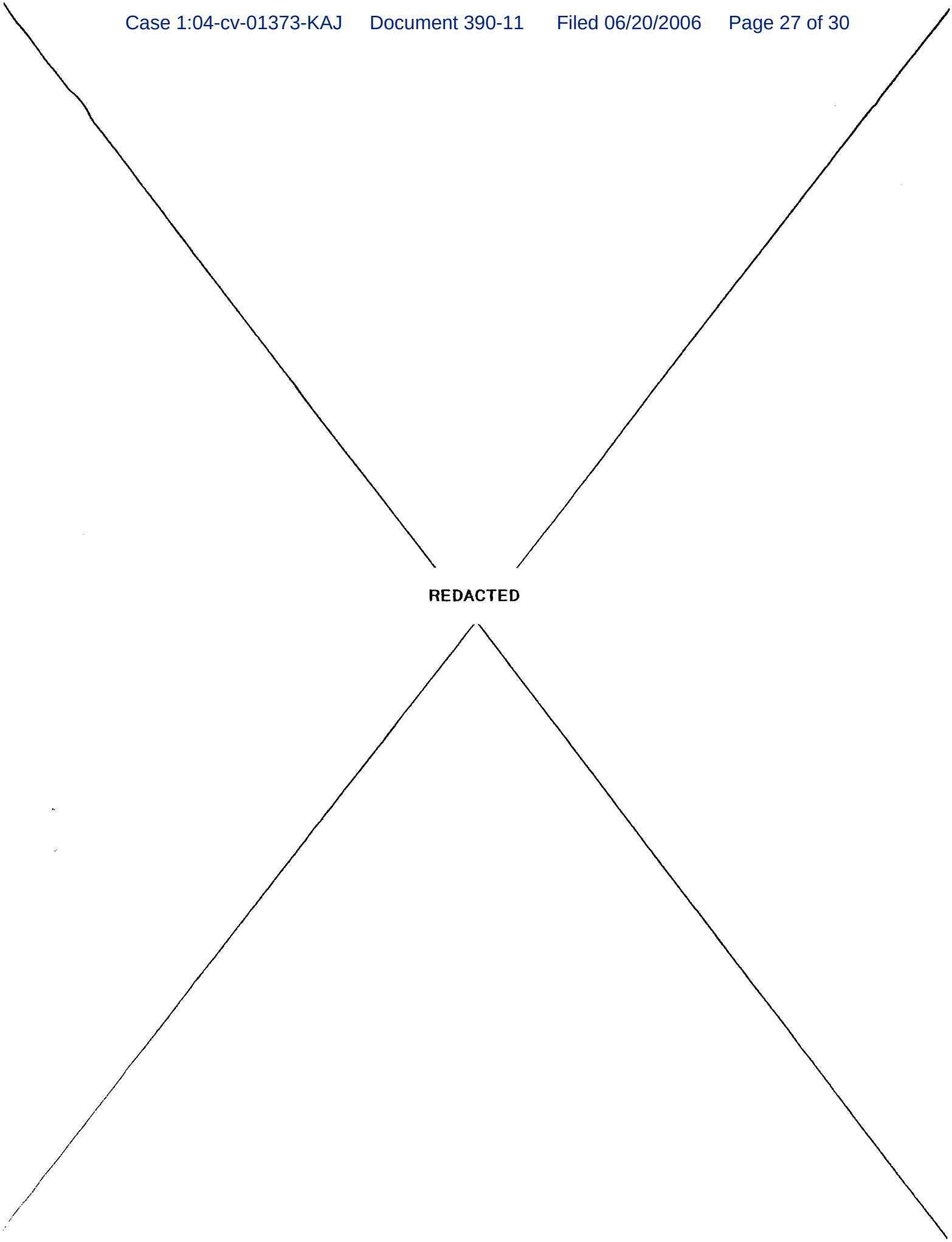
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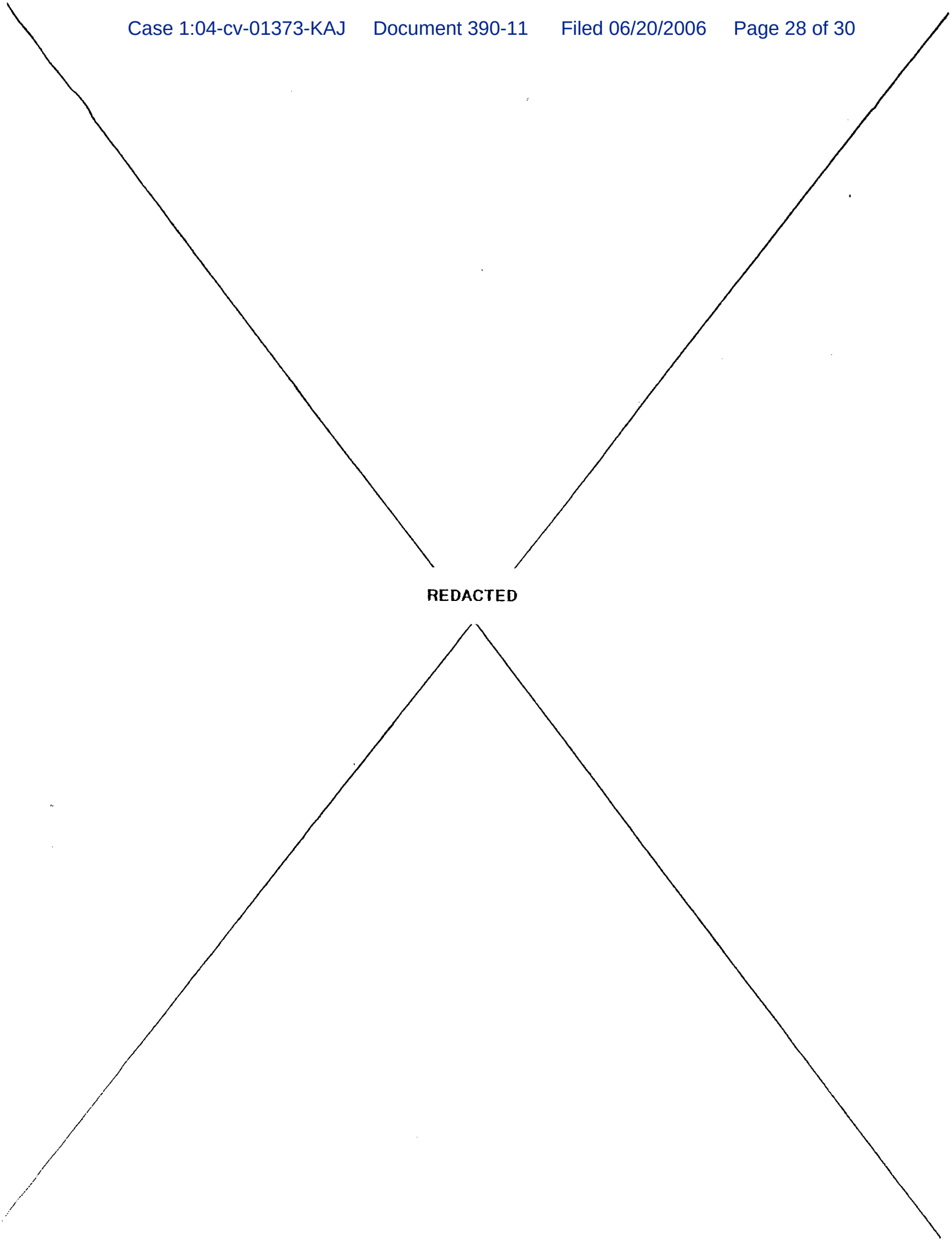
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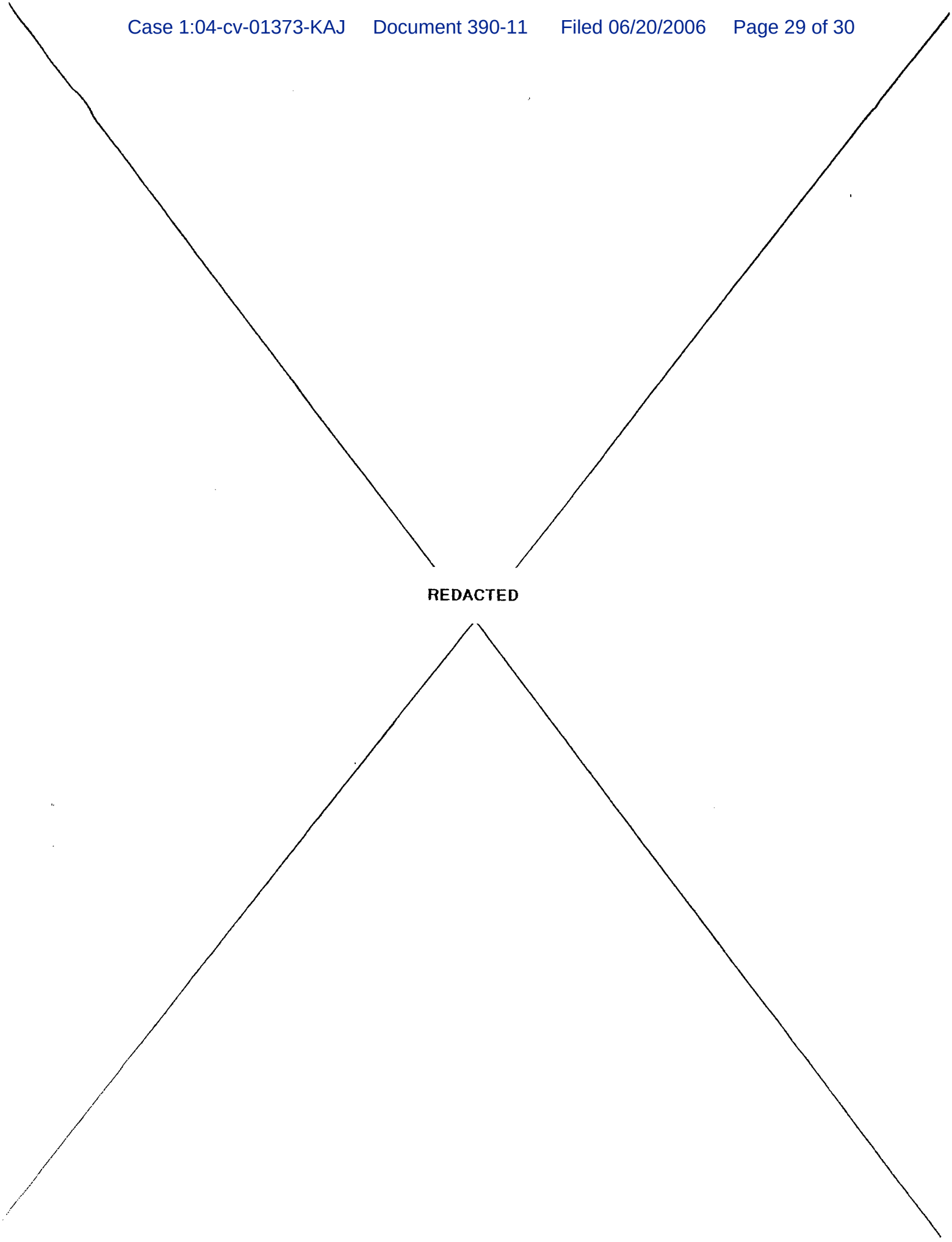
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CERTIFICATE OF SERVICE

I hereby certify that on June 20, 2006, I electronically filed Redacted Appendix to Defendants' Answering Brief in Opposition to Plaintiff Ampex's Motion for Summary Judgment that U.S. Patent No. 4,821,121 is Not Unenforceable Due to Inequitable Conduct to with the Clerk of the Court using CM/ECF which will send notification of such filing to the following:

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